AGENDA ITEM E-16

CITY OF LODI
COUNCIL COMMUNICATION

TM

AGENDA TITLE: **Approve Phase 3 Improvements Design Task Order for West Yost & Associates for White Slough Facility ($1,600,000)**

MEETING DATE: **September 7, 2005**

PREPARED BY: **Public Works Director**

RECOMMENDED ACTION: That the City Council approve a task order for West Yost & Associates for design of the Phase 3 improvements at the White Slough Facility.

BACKGROUND INFORMATION: The FY 05/06 Wastewater budget includes $1.6 million for design of the Phase 3 improvements at the White Slough Water Pollution Control Facility. West Yost & Associates was hired (following a competitive process) to prepare a Master Plan for wastewater treatment. As described in the Master Plan and in past staff reports to the Council, West Yost and the City have been undertaking phased improvements at the Facility to restore treatment capacity to the planned 8.5 million gallons per day level and to meet Title 22 (Tertiary) standards as required in our State discharge permit.

The City, utilizing the planning and design services of West Yost & Associates, has completed the installation of the tertiary improvements and currently is underway on standby power improvements. The Phase 3 improvements are mainly to the secondary treatment process and include:

- Upgrades and capital maintenance work on the head works
- Additional aeration capacity, including an evaluation of nitrogen removal
- A third secondary clarifier and related improvements
- A fourth digester and related improvements
- Related electrical, control, grading and associated improvements

The planned work is described in more detail on page 2 of the attached scope of work and shown schematically on the attached site plan.

A number of items that will likely be needed in the future are either not included or are only included in a preliminary manner. They include:

- Preliminary ADA upgrade assessment and control building improvements – Pending the ADA assessment, more or less work will be needed and a recommendation for building improvements will be addressed separately.
- Modifications to existing digesters – An evaluation of the existing troublesome mixing system will be done. Retrofits (if any) will be addressed separately.
- Nitrogen removal – As noted above, an evaluation will be done as to the cost and capacity impacts of performing nitrogen removal in the secondary plant. Final design of such improvements would be an additional cost. This issue is related to the potential treatment wetland installation and will be brought back to the City Council for discussion and direction.
- Pond aeration improvements – The scope includes preliminary evaluation and an allowance for final design based on minimal aeration to meet our current permit requirements. However, potential additional non-irrigation season industrial system flow may require additional aeration. This will be evaluated and, if necessary, brought back to the City Council for direction.

APPROVED: _____
Blair King, City Manager

- Irrigation tailwater pumping improvements – This system currently needs additional flow-handling capacity, however, the design depends on other improvements (wetlands, off-site storm water handling) and will be handled at a later date.
- Environmental review - These services are not included at this point and may be brought back as an additional task order.
- Control system improvements and development of an updated operations and maintenance manual for the Facility may also be additional task orders.
- Treatment wetlands – As noted above, a number of issues are being considered with this element (along with additional land acquisition) and will be brought back to the Council at a later date.
- Permit conditions – As has been mentioned at previous meetings, the City's discharge permit is being rewritten by the Regional Board. The new permit will be based on the California Toxic Rule, which has come into place since our last permit was written. While staff and our consultants have attempted to anticipate these requirements, we will not know for sure until we see the permit, possibly not until 2006.

Staff is recommending that the City continue with West Yost & Associates for wastewater planning and design work. Considerable time and money has already been invested in background work with this firm. We also note that their design work has resulted in smooth-running, under-budget construction projects. For example, the $7.5 million Phase 2 contract to install the City-furnished tertiary equipment has been completed with unforeseen change orders totaling only ½%. (Planned change orders, such as the installation of standby power, are not included in this percentage.) In addition, costs of their past planning and design work have come in, on average, 20% below the anticipated amounts.

FISCAL IMPACT: The preliminary engineer's estimate for the Phase 3 secondary plant improvements, including design, is $17.6 million ($1.6 million for design in FY 05/06 and $16 million in construction in FY 06/07). The total Phase 3 project will be funded from the balance of the 2004 wastewater Certificates of Purchase (COP) and a new 06/07 COP. Including allowances for the other items described in the staff report (land, treatment wetland, additional plant improvements, etc.), the next COP is estimated to be $22.5 million (net). The cost of the Phase 3 project, including design and the 06/07 COP, has been taken into account in the wastewater rate model and subsequent rate increases approved in 2004.

FUNDING AVAILABLE: Wastewater Fund (2004 Wastewater COP)

Ruby R. Paiste for
James R. Krueger, Finance Director

Richard C. Prima, Jr.
Public Works Director

RCP/pmf
Attachments
cc: West Yost & Associates
Del Kerlin, Wastewater Treatment Superintendent
Gary Wiman, Construction Project Manager

W E S T
Y O S T
& ASSOCIATES
Consulting Engineers

August 29, 2005

Mr. Richard Prima
Director of Public Works
City of Lodi
Department of Public Works
PO Box 3006
Lodi CA 95241-1910

Project No.: 213\00-05-17

SUBJECT: Task Order 19 for Design of Phase 3 Improvements—
City of Lodi's White Slough Water Pollution Control Facility

Dear Richard:

Attached is a proposed Task Order for design of Phase 3 Improvements to the City of Lodi's White Slough Water Pollution Control Plant. The proposed tasks and budgets have been revised in accordance with the comments we received from you and discussed last week. These services are a continuation of services currently being performed by West Yost & Associates and, along with facilities currently under construction, are required to meet waste discharge requirements.

The attached task order describes facilities that will be constructed under this Phase 3 improvement project, as well Phases 1 and 2 improvements currently under construction. These facilities include improvements identified in the 2001 Wastewater Master Plan to treat anticipated General Plan build-out flows, with the exception of treatment wetlands and a discharge outfall to Bishop Cut. As you are aware, this work has been delayed to allow ongoing studies to determine whether the relocation of the City's outfall will provide water quality benefits within the receiving waters.

Our total estimated fee to perform this work is $1,598,000, about $95,000 of which is for additional pre-design services. We anticipate that additional work will be recommended and potentially authorized following completion of predesign. Our estimated fee for design services represents slightly over 9 percent of the estimated $16.5 million construction cost (assuming mid-point of construction is mid-2007) of these improvements. Based on our experience, this is a typical level of effort for work that involves modifications to existing wastewater treatment facilities, which increases the complexity of design services. Please call me if you would like to meet to discuss our fee estimate. A detailed breakdown of the labor hour estimates and costs for each task has been attached to this letter.

Sincerely,

WEST YOST & ASSOCIATES

Bruce G. West
Principal

BGW:md

attachments

1260 Lake Boulevard, Suite 240 Davis, California 95616 Phone 530 756-5905 Fax 530 756-5991 www.westyost.com

TASK ORDER NO. 19

DESIGN OF PHASE 3 IMPROVEMENTS
CITY OF LODI – WHITE SLOUGH WPCF
WYA PROJECT NO. 213-00-05-17

In accordance with the Task Order Agreement between City of Lodi (City) and West Yost & Associates, Inc. (Consultant), dated January 13, 1999, Consultant is authorized to complete the Phase 3 work scope defined in this Task Order No. 19 according to the schedule and budget defined herein.

BACKGROUND

The City Water Pollution Control Facility (WPCF) currently treats approximately 6.3 million gallons per day (mgd) (annual average) of municipal wastewater. In early 2001, the City completed a Wastewater Master Plan (WWMP) that defined several potential treatment, discharge and reuse options to meet the future General Plan build-out flow demands of 8.5 mgd, as well as to satisfy new surface water discharge requirements issued around the same time. Using the "roadmap" outlined in the WWMP, the City has identified a preferred alternative consisting of the following phased improvements:

Phase 1 Improvement Project

The construction of Phase 1 improvements is completed. These improvements included:

- Aeration improvements, including removal of four existing multi-stage centrifugal blowers, and installation of four new multi-stage centrifugal blowers;
- Electrical system improvements to facilitate Phase 1, 2, and 3 improvements;
- Site improvements to facilitate Phase 2 improvements, including the removal and disposal of solids from a cannery solids pond, construction of a new pond levee, piping improvements, and importing and placing fill.

Phase 2 Improvement Project

The construction of Phase 2 improvements is completed, with the exception of standby power facilities. These improvements included:

- Effluent filtration related improvements, including:
  - Filter influent pump station and flow control structure;
  - Chemical building;
  - Cloth disk effluent filtration system
- UV disinfection related improvements, including:
  - Electrical building;
  - UV disinfection system;

- Modifications to existing aeration basins, including replacing diffusers in basins 3 & 4
- Fiberglass launder covers in two existing secondary clarifiers
- Cleaning of three existing anaerobic digesters
- Appurtenant work, including:
  - Onsite yard piping paving, grading, and drainage improvements;
  - Electrical system improvements;
  - New instrumentation and control systems and modifications to existing instrumentation and control systems
- Standby power facilities (added by change order)

Phase 3 Improvements Project

This Task Order addresses the engineering design of Phase 3 improvements. These improvements include:

- Headworks improvements, including:
  - Two influent screens;
  - Screenings washing, compaction and conveyance improvements;
  - Pumping improvements consisting of the replacement of two domestic influent pumps; relocation of a domestic influent pump to serve as an industrial influent pump, installation of a new industrial influent pump;
  - Miscellaneous headworks improvements, such as replacement of critical manual gates with self-contained motor-actuated mechanical slide gates, grating replacement, and repair and protection of corroded concrete surfaces.
- Aeration basin improvements, including:
  - Primary effluent and return activated sludge splitting facilities;
  - Two new aeration basins (basins 5 and 6) with appurtenances;
  - A baffle wall, mixers, and new diffusers in aeration basin 2;
  - New diffusers in aeration basins 1;
  - Provisions for future addition of mixed liquor recycle facilities in the new basins to accommodate denitrification (conduit, wall penetrations, etc.)

  Mixed liquor recycle facilities will not be incorporated into the project unless authorized by the City.
- Secondary sedimentation related improvements, including:
  - A new secondary clarifier (clarifier 3);
  - A new mixed-liquor flow-splitting structure;

- New mixed-liquor piping from the flow-splitting structure to existing clarifiers 1 and 2;
- A new RAS pump station;
- Modifications to the existing WAS pumping system.

- Solids digestion improvements including:
  - An anaerobic digester with pumped mixing system;
  - Digester heating appurtenances, including a heat exchanger, hot water pump, and boiler;

  Solids digestion improvements may also include new pumped mixing in existing digesters. The cost of converting replacing gas mixing systems in the existing 3 digesters with pumped mixing systems will be investigated, however replacement pumped mixing systems will not be incorporated into the project unless authorized by the City.

- Operations building improvements, under separate authorization from City following completion of an ADA evaluations study, including:
  - Conversion of the existing utility room into a women's washroom, and relocation of the clothes washer and dryer from the utility room to the existing women's washroom;
  - Re-arrangement and upgrade of the operations area and creation of an enclosed office for the chief operator.
  - Modifications to bring the public portions of the facility into compliance with the Americans with Disabilities Act (ADA).
- Holding pond aeration improvements.
- Appurtenant work, including:
  - Onsite yard piping paving, grading, and drainage improvements;
  - Electrical system improvements;
  - New instrumentation and control systems and modifications to existing instrumentation and control systems;

Construction of these improvements is expected to begin in the fall of 2006, and to be completed by the fall of 2008.

Other Future Work

The City may also construct tail water control improvements, treatment wetlands, a re-aeration basin, and a discharge outfall. At this time it is anticipated that these improvements will be constructed as part of a future construction project.

WORK SCOPE

Task 19-01. Project Management

This task consists of tracking progress, schedule, and budget; coordinating with subconsultants; and ensuring that the City's expectations are met in all aspects of the project. WYA's internal project management tools will be utilized to provide timely, detailed accounts of budget status to the project manager. Project progress will be tracked by the project manager on a regular basis and compared to the schedule and budget status to control costs and ensure timely delivery of services.

This task will also include participation in monthly meetings for the duration of the design activities to coordinate this project with other ongoing activities in the City.

Task 19-02. Topographic Survey and Aerial Mapping

Consultant shall update the topographic survey of the main wastewater treatment plant site in conjunction with Phase 1 and 2 design services. Consultant shall update the topographic survey of filtration/UV disinfection area and prepare a topographic survey of the equalization/holding ponds for use in preparing design documents for Phase 3 improvements.

Task 19-03. Pond Aeration Improvements Pre-Design

Pond aeration improvements are planned to remove BOD and control odors associated with industrial and tail water return flows and loadings. Wineries and other new industrial customers may significantly increase current industrial flows and loadings. Consultant shall analyze anticipated future industrial loading information provided by the City, and shall develop alternatives involving the construction of pond and/or aeration improvements to remove BOD and control odors. Consultant shall prepare a technical memorandum (TM) that summarizes the results of this analysis and includes pre-design level drawings and a construction cost estimate of the alternatives considered. Consultant shall meet with the City to discuss the results of the analysis, and shall include agreed upon pond aeration improvements similar to those identified in the master plan in subsequent design documents.

Task 19-04. Denitrifying Aeration Basin Pre-Design

Consultant shall utilize the Biowin™ program to simulate BOD, ammonia, and nitrate removal performance in the existing and planned aeration basins. Modeling results shall be used to evaluate various aeration basin configurations and operating characteristics, including sizes of an anoxic zone and various mixed liquor recycle rates. Consultant shall evaluate the potential impact of creating a denitrifying anoxic zone upon average dry weather flow capacity of the aeration basins, and shall develop an alternative that would maintain an average dry weather flow capacity of 8.5 mgd. Consultant shall develop conceptual designs for mixed-liquor recycle and both primary effluent and RAS flow splitting. Consultant shall prepare a technical memorandum (TM) that summarizes the results of this analysis and includes pre-design level drawings and a construction cost estimates of the alternatives considered. Consultant shall meet with the City to discuss the results of the analysis. Mixed liquor recycle facilities to

accommodate denitrification will not be incorporated into the design unless authorized as additional work by the City.

Task 19-05. Digester Mixing Pre-Design

Consultant shall develop pumped mixing alternatives for the planned new digester. Consultant shall prepare preliminary construction cost estimates for each pumped mixing alternative. Consultant shall prepare a technical memorandum (TM) that summarizes the results of this analysis and includes pre-design level drawings. Consultant shall meet with the City to discuss the results of the analysis, and shall include agreed upon digester mixing improvements in subsequent design documents.

Consultant shall evaluate gas compressor equipment and appurtenances associated with the gas mixing systems in the existing digesters and identify potential approaches for reducing maintenance and equipment replacement costs associated with these systems. Modifications to the existing digester gas mixing systems will not be incorporated into the design unless authorized as additional work by the City.

Task 19-06. Prepare 60% Complete Design Submittal

Consultant shall prepare a 60% complete design submittal. The design submittal will address Phase 3 improvements described in the Background section of this Task Order. The 60% complete design submittal shall include process & instrumentation diagrams, site plans, overall structural and mechanical plans, and an updated estimate of probable construction cost. Ten (10) sets of documents shall be submitted for review. This submittal is intended to allow City staff and other members of the project team to review and comment on the general design approach prior to proceeding with detailed design of each project component. Consultant shall perform a general quality assurance review of all documents prior to submission.

Task 19-07. Prepare 90% Complete Design Submittal

Consultant shall prepare a 90% complete design submittal. The 90% complete design submittal shall include essentially completed drawings, technical specifications, contract documents, and an estimate of probable construction cost for all project components. Ten (10) sets of documents shall be submitted for review. Consultant shall perform quality assurance, inter-discipline coordination, and buildability reviews of all documents in conjunction and concurrently with the review of these documents by City staff.

Task 19-08. Prepare 100% Complete Design Submittal

The 100% complete design submittal shall reflect all comments regarding the 90% complete submittal, and shall be a complete biddable set. Final drawings shall be submitted on polyester film and in electronic (AutoCAD 2005) format. Final specifications shall be submitted on printer-ready letter size paper, and in electronic (Microsoft Word 2003) format.

Task 19-09. Design Review Meetings

Review meetings will be conducted after City personnel have completed their review of the draft contract documents. Modifications to the draft contract documents resulting from the review comments will be incorporated into subsequent submittals. Meeting minutes will be prepared to document design decisions.

Task 19-10. Response to Value Engineering Comments

The City has retained the services of a value-engineering consultant to review preliminary design documents. Consultant's staff will meet with the value-engineering consultant at the 60% and 90% complete design stages, and will provide written responses to all written value-engineering comments.

Task 19-11. Prepare Construction Cost Estimates

Construction cost estimates will be prepared and updated at the 60%, 90% and 100% complete design stages. The final estimate of probable construction cost shall be submitted in both paper and electronic (Microsoft Excel 2003) format.

Task 19-12. Miscellaneous Tasks

Miscellaneous tasks include the following:

- Participation with City staff in a review of the public accessible areas of the existing Operations Building for compliance with ADA requirements and identification of modifications needed to remedy any deficiencies.
- Review of the existing tailwater pumping system and identification of options for improving the operation of this system.
- Evaluation of the existing unused flotation thickener and contact tank facilities to determine an optimal approach to either abandonment in place or demolition of these facilities.
- Additional tasks authorized by the City to the extent feasible within the project budget.

BUDGET

Our estimated fee for each task described above is summarized in Table 1.

Table 1. Estimated Design Services Costs

Task	Estimated Cost, dollars
Task 19-01. Project Management	66,840
Task 19-02. Topographic Survey and Aerial Mapping	20,310
Task 19-03. Pond Aeration Improvement Pre-Design	16,620
Task 19-04. Nitrifying Aeration Basin Pre-Design	29,020
Task 19-05. Digester Mixing Pre-Design	24,910
Task 19-06. Prepare 60% Complete Design Submittal	582,620
Task 19-07. Prepare 90% Complete Design Submittal	412,340
Task 19-08. Prepare 100% Complete Design Submittal	268,600
Task 19-09. Review Meetings	47,730
Task 19-10. Response to Value Engineering Comments	69,760
Task 19-11. Prepare Construction Cost Estimates	33,040
Task 19-12. Miscellaneous Tasks	26,210
Total	1,598,000

COMPENSATION

Compensation shall be in accordance with the provisions of the Task Order Agreement between Client and Consultant and the billing rate schedule contained in Exhibit A of that Agreement.

The compensation limit for services performed under this amendment shall not exceed $1,598,000. This estimate is based on our current understanding of project requirements and complexity. If additional funds are required to complete the services defined herein beyond this limit, Consultant shall notify Client in writing prior to reaching the authorized limit, and will not proceed with work in excess of the limit without the prior written approval of Client.

SCHEDULE

We propose to complete the design services described herein for advertisement in December, 2006, assuming notice to proceed is received in September, 2005.

WEST YOST & ASSOCIATES, INC.	CITY OF LODI
Signature	Signature
Bruce G. West Printed Name	Blair King Printed Name
Principal Title	City Manager Title
Aug. 29, '05 Date	Date

Fee Estimate - Task Order No. 19: Design of Phase 3 Improvements
City of Lodi - White Slough WPCF

Task	Estimated WYA Staff Labor Hours									Estimated Subconsultant Costs w/o Markup				Total Subconsutant Costs w/o Markup	Total Subconsutant Costs w/ Markup	Other Direct Costs	Total
	Principal $175	Vice President $165	Engineer Manager $155	Principal Engineer $143	Senior Engineer $128	Associate Engineer $114	Senior Drafter $87	2-Person GPS Crew $216	Admin $60	Airmaps Aerial Photo	IDG Structural	Easton Architectura	ATEEM Electrical				
19.01 Project Management																	
19.011 Manage Scope, Schedule, and Costs	40		100						40					$0	$0	$1,000	$25,900
19.012 Monthly Project Coordination Meetings	36		72	72	72				40					$0	$0	$1,570	$40,942
Subtotal	76	-	172	72	72	-	-	-	80	$0	$0	$0	$0	$0	$0	$2,570	$66,842
19.02 Topographic Survey & Aerial Mapping																	
19.021 Topographic Survey			2					16						$0	$0	$150	$3,916
19.022 Aerial Mapping					8					$12,000				$12,000	$13,200	$40	$14,264
19.023 Office Calculations					16									$0	$0	$80	$2,128
Subtotal	-	-	2	-	24	-	-	16	-	$12,000	$0	$0	$0	$12,000	$13,200	$270	$20,308
19.03 Pond Aeration Improvements Pre-Design																	
19.031 Analysis	4		8	8	16	40								$0	$0	$390	$10,082
19.032 Report Preparation	4		24				16		8					$0	$0	$250	$6,542
Subtotal	8	-	32	8	16	40	16	-	8	$0	$0	$0	$0	$0	$0	$640	$16,624
19.04 Aeration Basin Pre-Design for Denitrification																	
19.041 Data/Permit Requirements Review					16	4								$0	$0	$100	$2,604
19.042 Modeling	2				40									$0	$0	$220	$5,690
19.043 Conceptual Design	4		8		40		32							$0	$0	$390	$10,234
19.044 Hydraulic Profile Check	2				8									$0	$0	$50	$1,424
19.045 Report Preparation	4		8		40		8		16					$0	$0	$350	$9,066
Subtotal	12	-	16	-	144	4	40	-	16	$0	$0	$0	$0	$0	$0	$1,110	$29,018
19.05 Digester Mixing Pre-Design																	
19.051 Analysis	4		8	40							$5,000			$5,000	$5,500	$310	$13,470
19.052 Report Preparation	4		4	40			40		8					$0	$0	$440	$11,440
Subtotal	8	-	12	80	-	-	40	-	8	$0	$5,000	$0	$0	$5,000	$5,500	$750	$24,910
19.06 Prepare 60% Complete Design Submittal																	
19.061 General, Civil and Yard Piping Improvements	10	45	76	182	127	127	480		95				$5,000	$5,000	$5,500	$5,010	$135,719
19.062 Headworks Improvements	6	24	44	103	73	73	175		103		$4,000		$9,000	$13,000	$14,300	$2,620	$82,486
19.063 Aeration Basin Improvements	5	21	39	91	65	65	155		88		$15,000		$9,000	$24,000	$26,400	$2,320	$86,602
19.064 Secondary Sedimentation Related Improvements	6	28	48	115	81	81	245		116		$18,000		$12,000	$30,000	$33,000	$3,100	$113,629
19.065 Solids Digestion Improvements	7	30	52	124	87	87	212		130		$15,000		$9,000	$24,000	$26,400	$3,170	$108,926
19.066 Operations Building Improvements														$0	$0	$0	$0
19.067 Holding Pond Aeration Improvements	3	11	20	47	33	33	83		49		$4,000		$6,000	$10,000	$11,000	$1,210	$42,440
19.068 Quality Assurance/Control	12		24	24	24									$0	$0	$490	$12,814
Subtotal	49	159	303	686	489	465	1,352	-	580	$0	$56,000	$0	$50,000	$106,000	$116,600	$17,920	$582,616
19.07 Prepare 90% Complete Design Submittal																	
19.071 General, Civil and Yard Piping Improvements	6	27	46	109	76	76	288		57				$10,000	$10,000	$11,000	$3,010	$89,135
19.072 Headworks Improvements	3	15	26	62	44	44	105		62		$4,000		$12,000	$16,000	$17,600	$1,570	$58,510
19.073 Aeration Basin Improvements	3	13	23	55	39	39	93		53		$12,000		$12,000	$24,000	$26,400	$1,390	$62,519
19.074 Secondary Sedimentation Related Improvements	4	17	29	69	48	48	147		70		$15,000		$18,000	$33,000	$36,300	$1,860	$84,678
19.075 Solids Digestion Improvements	4	18	31	75	52	52	127		78		$10,000		$12,000	$22,000	$24,200	$1,900	$73,713
19.076 Operations Building Improvements														$0	$0	$0	$0
19.077 Holding Pond Aeration Improvements	2	6	12	28	20	20	50		29		$3,000		$8,000	$11,000	$12,100	$730	$30,968
19.078 Quality Assurance/Control	12		24	24	24									$0	$0	$490	$12,814
Subtotal	34	96	192	421	303	279	811	-	348	$0	$44,000	$0	$72,000	$116,000	$127,600	$10,950	$412,337
19.08 Prepare 100% Complete Design Submittal																	
19.081 General, Civil and Yard Piping Improvements	4	18	30	73	51	51	192		38				$6,000	$6,000	$6,600	$2,000	$58,684
19.082 Headworks Improvements	2	10	17	41	29	29	70		41		$3,000		$9,000	$12,000	$13,200	$1,050	$40,477
19.083 Aeration Basin Improvements	2	8	16	36	26	26	62		35		$6,000		$9,000	$15,000	$16,500	$930	$40,583
19.084 Secondary Sedimentation Related Improvements	3	11	19	46	32	32	98		46		$8,000		$8,000	$16,000	$17,600	$1,240	$49,852
19.085 Solids Digestion Improvements	3	12	21	50	35	35	85		52		$4,000		$9,000	$13,000	$14,300	$1,270	$47,312
19.086 Operations Building Improvements														$0	$0	$0	$0
19.087 Holding Pond Aeration Improvements	1	4	8	19	13	13	33		20		$2,000		$6,000	$8,000	$8,800	$480	$21,372
19.088 Quality Assurance/Control	8		20	20	20									$0	$0	$400	$10,320
Subtotal	23	64	132	285	206	186	541	-	232	$0	$23,000	$0	$47,000	$70,000	$77,000	$7,370	$268,599
19.09 Design Review Meetings																	
19.091 60% Complete Review Meeting	8		16	16							$800		$800	$1,600	$1,760	$250	$8,178
19.092 90% Complete Review Meeting	8		16	16							$800		$800	$1,600	$1,760	$250	$8,178
19.093 100% Complete Review Meeting	8		16	16							$800		$800	$1,600	$1,760	$250	$8,178
19.094 Respond to Comments/Other Review Meetings	40		40	40							$1,600		$1,600	$3,200	$3,520	$760	$23,200
Subtotal	64	-	88	88	-	-	-	-	-	$0	$4,000	$0	$4,000	$8,000	$8,800	$1,510	$47,734
19.10 Response to Value Engineering Comments																	
19.101 Value Engineering Meetings	16		32	32	32						$1,800		$1,800	$3,600	$3,960	$660	$21,052
19.102 Response to VE Comments Regarding 60% Complete Submittal	8		20	80	40						$2,000		$2,000	$4,000	$4,400	$840	$26,300
19.103 Response to VE Comments from Biddability & Constructability Review	6		18	60	30						$2,500		$2,500	$5,000	$5,500	$650	$22,410
Subtotal	30	-	70	172	102	-	-	-	-	$0	$6,300	$0	$6,300	$12,600	$13,860	$4,920	$69,762
19.11 Prepare Construction Cost Estimates																	
19.111 At 60% Completion				100									$1,000	$1,000	$1,100	$570	$15,970
19.112 At 90% Completion				60									$1,000	$1,000	$1,100	$340	$10,020
19.113 At 100% Completion				40									$1,000	$1,000	$1,100	$230	$7,050
Subtotal	-	-	-	200	-	-	-	-	-	$0	$0	$0	$3,000	$3,000	$3,300	$1,140	$33,040
19.12 Miscellaneous Tasks																	
19.121 Participate in ADA Evaluation of Operations Building			8	8				4	4			$5,000	$1,000	$6,000	$6,600	$140	$10,228
19.122 Pond tailwater pumping system evaluation	2		16	12	16			4	8				$1,000	$1,000	$1,100	$320	$9,358
19.123 DAFT and Chlorine Contact Tank Abandonment/Demolition Evaluation	2		16	24					2					$0	$0	$260	$6,642
Subtotal	4	-	40	44	16	-	-	8	14	$0	$0	$5,000	$2,000	$7,000	$7,700	$710	$26,228
Totals	308	319	1,058	2,056	1,373	975	2,799	24	1,286	$12,000	$138,300	$5,000	$184,300	$339,600	$373,560	$49,860	$1,598,019

BORROW AREA

SLUDGE LAGOON No. 1

ABANDON SLUDGE LAGOON No. 1

SLUDGE REMOVAL

FLOATING AERATORS

POND RECIRCULATION PUMP STATION

IRRIGATION PUMP STATION

48" FE

10" DSL

20" IW

30" IW

24" RAS

EC

EC

8" RW

6" WW

CLARIFIER No.2 (EXIST)

36" SE

36" ML

36" ML

EXIST RAS PUMP STATION

NEW ML DISTRIBUTION STRUCTURE

NEW RAS PUMP STATION

36" SE

36" ML

16" RAS

(FILL)

CLARIFIER No.1 (EXIST)

6" SC

60" ML

48" SE

60" ML

CLARIFIER No.3

36" SE

CLEARWELL/ BACKWASH

FILTERS

(FILL)

EQUIPMENT STORAGE PAD

STORAGE SHED

FUEL STORAGE TANK

AERATION TANK No. 6

AERATION TANK No. 5

NEW DIFFUSERS, BAFFLE WALL, AND MIXER

NEW DIFFUSERS

AERATION TANK No. 2

AERATION TANK No. 1

WASTE GAS BURNER

PRIMARY DIGESTER No. 2

PRIMARY DIGESTER No. 1

STORAGE SHED

PRIMARY SEDIMENTATION BASINS

48" SE

PLANT EFFLUENT BOX

48" FE

48" FE

CHLORINE CONTACT TANKS

PRIMARY DIGESTER No. 4

PRIMARY DIGESTER No. 3

NEW BAR SCREENS & PUMPS HEADWORKS

DAFT No. 1

DAFT No. 2

30" BP

8" SS

30" BP

UV FACILITY

UV FILTER CONTROL BLDG

CHEMICAL STORAGE

ABANDON CHLORINATION BUILDING

CONTROL BUILDING

NEW BLOWERS

SLUDGE DEWATERING

IMPROVEMENT SCHEDULE

- 2003 CALENDAR YEAR
- 2004 CALENDAR YEAR
- 2005 & 2006 CALENDAR YEARS

DEMOLITION SCHEDULE

- 2004 CALENDAR YEAR
- 2005 & 2006 CALENDAR YEARS

0 20 40
SCALE IN FEET

City of Lodi
PLANNED IMPROVEMENTS TO WHITE SLOUGH WPCP

WEST YOST & ASSOCIATES

Cad File: 1/213/01-07/PreDesignReport/Fig2-4.dwg

CITY OF LODI

PUBLIC WORKS DEPARTMENT

CITY HALL, 221 WEST PINE STREET
P.O. BOX 3006
LODI, CALIFORNIA 95241-1910
(209) 333-6706
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EMAIL pwdept@lodi.gov
http:\\www.lodi.gov

September 1, 2005

Mr. Dave Anderson
West Yost & Associates, Inc.
1260 Lake Blvd., Ste. 240
Davis, CA 95616

SUBJECT: Approve Phase 3 Improvements Design Task Order for West Yost & Associates for White Slough Facility ($1,600,000)

Enclosed is a copy of background information on an item on the City Council agenda of Wednesday, September 7, 2005. The meeting will be held at 7 p.m. in the City Council Chamber, Carnegie Forum, 305 West Pine Street.

This item is on the consent calendar and is usually not discussed unless a Council Member requests discussion. The public is given an opportunity to address items on the consent calendar at the appropriate time.

If you wish to write to the City Council, please address your letter to City Council, City of Lodi, P. O. Box 3006, Lodi, California, 95241-1910. Be sure to allow time for the mail. Or, you may hand-deliver the letter to City Hall, 221 West Pine Street.

If you wish to address the Council at the Council Meeting, be sure to fill out a speaker's card (available at the Carnegie Forum immediately prior to the start of the meeting) and give it to the City Clerk. If you have any questions about communicating with the Council, please contact Susan Blackston, City Clerk, at (209) 333-6702.

If you have any questions about the item itself, please call me at (209) 333-6759.

P. Farris

for: Richard C. Prima, Jr.
Public Works Director

RCP/pmf
Enclosure
cc: City Clerk